

REMARKS

Claims 1-25 are pending in the present application. Claims 1, 15, and 25 stand rejected on grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 22 and 34 of U.S. Patent No. 6,973,566 (Smith) in view of Applied Cryptography. Claims 1, 3-5, 9-12, 15, 17-18, 20-22, and 25 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by England, et al (U.S. Patent No. 6,986,059). Claims 2 and 16 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over England in view of Fleming, et al (U.S. Patent No. 6,212,360). Claims 6 and 19 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over England in view of Weidner, et al (U.S. Patent No. 5,987,572). Claims 7-8 and 23-24 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over England in view of Bestock (U.S. Patent No. 5,363,449). Claims 13-14 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over England in view of Albrecht, et al (U.S. Patent No. 6,510,521). The Examiner's rejections are respectfully traversed.

This response includes a terminal disclaimer. Applicants respectfully request the obviousness-type double patenting rejection be withdrawn.

Independent claim 1 sets forth, among other things, a standard mode driver to extract encrypted data from a digital received signal and a privileged mode driver for decrypting encrypted data, which includes one or more control codes. The decrypted control codes are provided to a physical layer hardware unit, which uses the decrypted control codes to configure assigned transmission parameters of the physical layer hardware unit. Independent claim 15 sets forth, among other things, receiving encrypted data over a communications channel in a standard processing mode of a processing unit and transitioning the processing unit into a privileged

processing mode. Claim 15 also sets forth decrypting encrypted data in a privileged processing mode, extracting control codes from the decrypted data in the privileged processing mode, and transmitting an upstream signal over a communications channel based on transmission assignments defined by the control codes.

Applicants use a separate standard mode driver and a privileged mode driver to enhance security in a software implemented communication system, where standard drivers are susceptible to external tampering. Applicant defines privileged mode as “a mode of operation not visible to other processes, such as applications or drivers, executing on the computer 100” (page 13, lines 21-23).

The Office Action asserts that England teaches these features. To the contrary, England merely teaches a system capable of operating in a privileged mode. The passages cited by the Office Action from columns 5-7 only describe how security levels may be assigned and memory regions may be reserved to facilitate a privileged mode. England includes absolutely no disclosure of a communication system employing control codes and standard and privileged modes to facilitate communication, much less extracting encrypted data in a standard mode and decrypting the data in a privileged mode to extract control codes. England does describe standard and privileged modes, but nothing more.

As the Examiner well knows, an anticipating reference by definition must disclose every limitation of the rejected claim in the same relationship to one another as set forth in the claim. *In re Bond*, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). To the extent the Examiner relies on principles of inherency in making the anticipation rejections in the Office Action, inherency requires that the asserted proposition necessarily flow from the disclosure. *In re Oelrich*, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981); *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1463-64 (Bd. Pat. App.

& Int. 1990); *Ex parte Skinner*, 2 U.S.P.Q.2d 1788, 1789 (Bd. Pat. App. & Int. 1987); *In re King*, 231 U.S.P.Q. 136, 138 (Fed. Cir. 1986). It is not enough that a reference could have, should have, or would have been used as the claimed invention. “The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Oelrich*, at 326, quoting *Hansgirk v. Kemmer*, 40 U.S.P.Q. 665, 667 (C.C.P.A. 1939); *In re Rijckaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993), quoting *Oelrich*, at 326; see also *Skinner*, at 1789. “Inherency ... may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” *Skinner*, at 1789, citing *Oelrich*. Where anticipation is found through inherency, the Office’s burden of establishing prima facie anticipation includes the burden of providing “...some evidence or scientific reasoning to establish the reasonableness of the examiner’s belief that the functional limitation is an inherent characteristic of the prior art.” *Skinner* at 1789.

Applying the logic of the Office Action would suggest that a patent for a general purpose computer would inherently anticipate all claims for software capable of being executed by the computer. This construction cannot be supported. England provides no teaching at all of how to use the privileged mode features of the computer system to implement communication. The mere description of a computer system capable of operating in a privileged mode does not inherently teach the features of extracting encrypted data in a standard mode and decrypting the data in a privileged mode to extract control codes for controlling the communication.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not anticipated by England and request that the Examiner’s rejections of claims 1, 3-5, 9-12, 15, 17-18, 20-22, and 25 under 35 U.S.C. 102(b) be withdrawn.

The dependent claims rejected by the Office Action are allowable for at least the reasons provided above. The cited references do not cure the defects identified above, and accordingly, it is respectfully submitted that the pending claims are not obvious in view of the prior art of record.

The dependent claims also include additional features that distinguish them from the art of record. Claims 9 and 21 include the additional feature of encrypting the control codes extracted from the previously decrypted data in the privileged mode, sending the encrypted control codes in the standard mode to the physical layer hardware. This encryption represents a second encryption distinct from the encryption previously performed on the incoming data. The incoming data is already encrypted. In the privileged mode, the data is decrypted, the control codes are extracted and then re-encrypted. The encrypted control codes are then sent in the standard mode to the physical layer hardware. England does not describe the communication of control codes at all, much less re-encrypting the control codes in a privileged mode and subsequently sending them in a standard mode in encrypted form to the physical layer device.

For at least the aforementioned reasons, Applicants respectfully submit that the present invention is not obvious over the prior art of record. Applicants respectfully request that the Examiner's rejections of claims 2, 6-8, 13-14, 16, 19, and 23-24 under 35 U.S.C. 103(a) be withdrawn.

It is respectfully submitted that all claims pending in the present application are in condition for allowance. The Examiner is invited to contact the undersigned with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

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